



## **Winter Term 2022**

January 4-22

**ENGAGEMENT, EMPATHY, INTEGRITY, PASSION, CONFIDENCE, CREATIVITY**

The following courses are offered during Winter Term 2022. Courses are listed alphabetically by title. Instructors and the estimated student cost are also listed.

Course selection begins Monday, November 8 and ends Tuesday, November 16. Students will rank eight courses in which they have interest and would be excited to participate. Students are enrolled based on a number of factors, including individual interest, grade, and winter afternoon activity. All things being equal and in the interest of fairness, the academic office will use a randomizer to assist in the course placement of students. Except in special circumstances approved by Ms. McDonough, students may not take the same Winter Term course twice.

*A NOTE ABOUT EXPECTED COST: The cost to most students will be approximately \$100 or less for books, materials or minor expenses (indicated by "\$"). In a few cases, indicated by "+\$", the relatively high cost of offering the course (usually related to travel expenses) requires the school to ask for a larger student contribution beyond books and materials.*

### **1. Artificial Intelligence: From Fact to Fiction**

D. Ward and S. Spicer

Expected Cost: \$

What makes machines 'intelligent'? How do they 'think'? How do intelligent machines make decisions? Hollywood and pop culture tell us one thing about super computers and intelligent machines, but how much of that is based in reality? Come and explore both the fiction side (movies, novels, short stories) and the factual side (learning 'machine learning' algorithms and classifiers) to better understand how machines think.

### **2. Baseball**

M. Bruschi and K. McDowell

Expected Cost: +\$250

The love of baseball takes on many forms. Come and explore your favorite baseball statistics (while learning and even inventing some new ones!), debate the possibility of an expansion team, cast your Hall of Fame ballot, try your hand at play-by-play analysis and color commentary, score a game the old-fashioned way, and create your own "30-for-30"-style documentary short film. Plus you get to travel to the Baseball Hall of Fame in Cooperstown, New York! In class, we will examine and unpack not only the play that happens on the field, but also how the media, broadcasters, baseball operations, players, and fans handle pregame, in-game, and postgame analysis. We will also ask students to share with the group their favorite books, FanGraphs articles, classic games, and YouTube channels about baseball; students will have a good degree of agency in selecting the specific material we discuss in class.

### **3. Brooks History & Documentary Film**

L. Latham and K. Moltz

Expected Cost: \$

Become an expert on Brooks history and make a video that will live forever in the Frank D. Ashburn Archives! Using Ken Burns and his documentaries about US history and culture as models, students produce their own short films about Brooks history. The school archives provide a rich source of written, audio, and visual materials. Students learn to tell compelling stories and use iMovie to create their final projects, which will become a permanent part of the archival collection. Doing the work of historians is a fun, time-consuming, rewarding experience. Students become knowledgeable about the school's history; they study how documentaries are created, written, edited, and produced. Guest speakers, classic films, and field trips provide additional learning opportunities for the class.

#### **4. Car Wars**

P. Gallo and A. Konovalchik

Expected Cost: \$

A very hands on approach to automotive restoration and repair! This term will welcome the return of an antique 1952 Ford Coupe that is being transformed into a Custom Hot Rod! Term participants will be instructed and guided on the many challenging repairs and fabrication that is involved with such a project. Participants will be encouraged to evaluate, research, and repair the many issues involved in automobile systems. The term will focus, but is not limited to, brake, fuel, electrical, and engine cooling systems. One class trip to an auto museum or show is tentatively scheduled. Please note: This is an interactive class. Participants will likely come into contact with automotive fluids (engine oil, coolant, brake fluid).

#### **5. Connoisseurship and Culture: The Art of Tasting**

C. Clater, O. Budd-Pearson, and D. Davies

Expected Cost: \$

Come and tickle your tastebuds with Ms. Clater, Dr. Davies and Ms. O. Discover new flavors and learn to appreciate the various ingredients and methods that go into making some of the world's most delicious foods. Of special focus in this class is chocolate, cheese, olive oil and honey. You will learn how to taste like a professional, appreciate food on different levels, and understand how to appropriately contextualize special "fine" foods within their respective cultures. You will also learn where to find delicious things in grocery stores from Whole Foods to Market Basket and how to select the best when there are hundreds of options. Using tasting methods and terminology you will learn to level up your eating and make amazing edible contributions to all your family events.

This course includes trips to: Formaggio Kitchen (Cambridge, MA), Taza Chocolate (Somerville, MA), Joseph's Trattoria, (Haverhill, MA), the North End (Boston, MA) and various grocery stores.

This course requires an open mind and a willingness to expand your palette and participate fully. There is potential exposure to nuts at Taza Chocolate and the course requires eating cheese, chocolate, honey and olive oil. If you have a severe allergy, or you prefer to not eat one or more of these items, this course is not a good fit for you.

## **6. “Creatively Maladjusted” - Film, Art, Media and Social Justice**

P. Musto and N. Rios-Moya

Expected Cost: \$

In a society inundated with media and film many groups are invisible and silent. Until a group of researchers (you) - discovered something different. Martin Luther King, Jr. stated that "human salvation lies in the hands of the creatively maladjusted." So, join the maladjusted during winter term for an action packed session of critical analysis of films, television, art, theater, and social media through the lens of social justice. Equipped with a clean perspective, a sharp wit, and a genuine love of the art, media, and film – you will boldly explore the world of filmmaking, play writing, advertising and art on a quest to discover the true depictions of race, class, gender, ethnicity, sexual orientation and more on film. Media does not want you to be distracted by such serious and accurate analysis. So join us in a thrilling examination of media, art and film. This workshop will culminate with the opportunity for you to create your own art that comments on the racism, homophobia, xenophobia, and other forms of bias prevalent in modern society. This course will include collaborations with playwrights, filmmakers, a film company, artists, and a film festival.

## **7. Crime Junkies**

S. Voigt, A. Sacco, and S. Downey

Expected Cost: \$

Students will investigate a fake crime (inspired by true events) through a podcast they will write and perform. They will utilize skills such as fingerprint analysis, blood spatter science, and human anatomy while also discussing historical events. We will head out into the field and investigate a “real” crime scene, putting what we learn to the ultimate test, and we’ll also watch some films to get us even more inspired.

## **8. Dive In with SCUBA**

L. Hajdukiewicz and P. Moccia

Expected Cost: +\$250 (course materials) +\$2850 (trip)

This course will provide an overview and introduction to the world of scuba diving. The course will include an introduction to many facets of the science of scuba diving, from the history of the sport, to the equipment and technology of scuba, and to an appreciation of the underwater world. Students will be participating in PADI (Professional Association of Diving Instructors) certification as a part of the course. The course will be offered in conjunction with Dive the World and owner/instructor, Susan Copelas. Students will travel to Roatan during the last week of the course to complete their certification and experience the wonders of diving firsthand. While in Roatan, students will participate in a coral reef restoration program, assist with lionfish eradication protocols, and learn about Honduran culture through their interactions with guides and residents.

*NOTE: Please ONLY sign up for this Winter Term offering if you have already received approval from Mrs. Hajdukiewicz.*

## **9. Dream It, Design It, Build It! Entrepreneurship for the 21st Century**

S. Bery

Expected Cost: \$

Do you have BIG IDEAS? Are you interested in designing products? Have you always wanted to monetize your expertise? Dream It, Design It, Build It! Is a Winter Term course focused on dreaming, designing, and building your own business idea! We will use Design Thinking to create a product or service that helps to address a problem (small or large) that you encounter in your life or in the world at large. Join us and you will learn how to pitch an idea for funding, combine teamwork with Makerspace technologies to develop, prototype, and take to-market your original idea. Culminating at the Winter Term symposium, where the entire Brooks community can interact with your design process, and potentially, purchase your product or service!

## **10. Environmental Artivism**

B. Wheelden and S. D'Annolfo

Expected Cost: \$

Students will work with Environmental Artist/Activist Pippin Frisbee Calder on the installation of her interactive exhibition [Cancelled Edition- website for this installation](#), in the Lehman Gallery. With inspiration from Pippin's work, the students will research using the Massachusetts Endangered, Threatened, and Special Concern Species List to identify, sketch, design, and create their own site specific installation. By incorporating visual and written information about a chosen species extinction relevant to their findings, the students will creatively collaborate to communicate a cultural concern in an exhibition of learning at the Lehman Gallery. In order to diversify our means of expression and explore the role of language in artivism, students will read and discuss poetry and vignettes. Students will come to know contemporary ecopoets born from the evolving genre of environmental poetry in order to explore their roles as artists and citizens of the world. Daily activities will include nature walks, journaling, sketching. Trips will include visits to the Isabella Stewart Gardner, MFA, and more!

## **11. Gaming Unplugged**

L. Davis and N. Seals

Expected Cost: \$

Learn the different styles of games from cooperative to 1v1, board games to card games, and everything in between. Discuss the similarities and differences between the different categories of games while developing your very own game. Play the games you and your classmates create as "testers" to help flush out any flaws and give constructive feedback for the creators. All that you need is a love of games, a creative attitude, and maybe a competitive bone or two.

## 12. **Harry Potter and the Prisoner of Azkaban LIVE!**

C. Davis, A. Campbell, and M. Hill

Expected Cost: \$

*Harry Potter and the Prisoner of Azkaban*, starring Daniel Radcliffe, Emma Watson, and Rupert Grint, was released in 2004. It was both a commercial hit (\$796.2 million worldwide box office) and a critical success (90% on Rotten Tomatoes). The film, directed by acclaimed Mexican filmmaker Alfonso Cuarón, was a technical marvel, featuring impeccable pacing, stunning cinematography, and groundbreaking CGI. The movie's major themes of friendship, growing up, responsibility, and morality are all timeless and connect with both children and adults.

In this winter term class, we will put on a live action parody performance of the movie *Harry Potter and the Prisoner of Azkaban* in its entirety. Following the highly successful performances of *Titanic LIVE*, *The Dark Knight LIVE*, *Jurassic Park LIVE*, and *UP LIVE*, *Harry Potter and the Prisoner of Azkaban LIVE* will be the largest and most complex performance yet! During our time together, we will write the script, create the sets, build all of the props, design the costumes, create the score and sound effects, and then perform the movie, live on stage, in the auditorium in the Center for the Arts in front of the Brooks community during the final week of Winter Term. No background knowledge or experience with acting, set design or script writing is required, just a willingness to be creative and to participate genuinely. This course is a lot of work, but past students have expressed how rewarding it is to put on the performance and see the successes first hand. So, as a word of advice, do not sign up for this course if you are not willing to be fully invested in all facets of the performance.

## 13. **"Hawks and Doves"**

W. Waters and J. Packard

Expected Coat: +\$400

In this course, students will be part of a deep dive into American politics. We will begin by coming to know and understand one another in an effort to position ourselves to engage in healthy dialogue about ideological points of view, challenging national issues, and public policy in an age of pronounced dissonance and polarization. We will spend time learning about our own individual political identity in an effort to better understand what matters to us and why. With a better understanding of who we are sharing the course with and our own political identity, we will be prepared to look closely at American politics in the brave space we hope to foster. We will look closely at the many national issues of the day; read a range of viewpoints on those issues; watch films and news clips that approach and characterize the issues differently; meet with elected officials, staff supporting those elected officials, and lobbyists who attempt to influence elected officials and shape public policy. We will travel to Washington, DC, for three days in order to get an up close and personal look at national politics in action via a range of Brooks School alumni, alumnae, and friends who "do" politics for a living. Along the way, we will explore the intersection of idealism and pragmatism, and perhaps uncover some of the keys to turning dissonance into harmony and polarization into collaboration. Ultimately, it is our hope that these few weeks provide opportunities for all of us to become better citizens in the many communities we are a part of.

#### **14. How to be an American Dog: Past and Present**

G. Saucedo

Expected Cost: \$

Do you currently share your life with a dog? If you don't, it's likely that you know someone who does. According to the American Veterinary Medical Association, more than 48 million households in the United States have at least one dog as a member. The role these dogs play in the lives of their human families has changed drastically over time. Whether looking at what they are fed, how they are trained, or where they are sourced from, trends over the last century have swung from one end of the spectrum to the other when it comes to what responsible dog guardians are supposed to do. In this course, we'll study that evolution and examine the reasons behind the changes. Why have some breeds seen their popularity skyrocket to such levels that overbreeding has become a real concern while at the same time more than 3 million dogs enter animal shelters in the US each year? These are just some of the questions and issues we'll consider as we examine the evolving role of "man's best friend" in American life using books, articles, podcasts, and films. But no one can truly study the importance of dogs in American daily life without spending time with actual pooches themselves, so we'll do that as well. Part of each day will be devoted to dog walking and dog training. You may be surprised at the skills you discover in yourself and your canine co-pilot during this part of the course, but regardless of how good your down/stay ends up being by the end of winter term, there is no doubt that all of the furry companionship will have helped lower your stress levels and made some good doggy boy or girl very happy.

#### **15. Mock Trial**

P. Neissa, M. Veit, and J. Hayes

Expected Cost: \$

Students are taught the basics of the American legal process in preparation for their participation in a mock trial in which a verdict is handed down by either a judge or jury. The course utilizes case materials provided by bar organizations and mock trial competitions across the country (including some actual cases), as well as readings from legal codes, handbooks, statutes and case law. Videos and courtroom movies and presentations are also included in the curriculum. At some point during the course, students attend trial proceedings in a local District or Superior Court, and are visited by local trial attorneys, as scheduling allows. The course not only teaches students about American jurisprudence, it also allows them to develop analytical, rhetorical and oratorical skills that serve them well in all walks of life.

## **16. North Atlantic Surf Science and Technology**

R. Dobbins and J. Rooney

Expected Cost: +\$150

Have you ever wondered where waves come from? What makes every wave different? Why do some waves break perfectly and others close out? How has the culture of surfing evolved from anti-authoritarian to a multi-billion dollar business? What are the new economics of the industry? How did surfing help sports like skateboarding develop?

This winter term class is an experiential learning course focused on the science and technology utilized in surfing. Physical and geographical influences on surfing will be explored, providing a deep scientific dive into the physics, sustainability, economics, and culture. There will be opportunities for students to take the initiative, make decisions, and be accountable for the results in this class, primarily through constructing a sustainable wooden surfboard with help from Grain Surfboards up in York, Maine. For students, this will include learning from natural consequences, making mistakes, and finding successes. Additionally, this course will allow students to practice surfing, working to acquire basic skills in surfing. The course incorporates practical surfing sessions, practicing body movement, and the physical principles that underpin the sport of surfing.

If you pick this course, be prepared to go surfing at Surf's Up in Nashua, NH, eat tacos in Hampton, NH, take trips to explore wave breaks, spend time in the Makerspace and get your hands dirty. Previous experience in any of the sports is not required.

## **17. Passion to Pass It On**

L. Miller and G. Dobbins

Expected Cost: \$

What would you do if you won the lottery? Would you want to make other people's lives better? What are you passionate about? How can you help? Spend time off-campus discovering why people support different causes. See how organizations and individuals help others and make their lives better through work, wisdom, and wealth. Make an impact.

We will spend a couple of nights in Boston to experience the organizations first hand and hear from the alumni and parents who are passionate about their work in the nonprofit sector. Hunger, homelessness, education, poverty – are the four general areas we will look into. From root causes to sources of relief for people who are affected by these issues.

We will learn, in detail, about four different nonprofits, how they work, and the communities they help in the Boston area. Throughout the course, you will become a philanthropist and study a specific organization that you will then support with a grant. We can make a difference in people's lives. Learn what it feels like to make a difference.

**18. Raku Two**

T. Smith, L. McLoughlin, N. Fernandes, and L. Nichols (guest potter)

Expected Cost: \$

Under the teaching leadership of professional potter Laura Nichols we will learn and develop our skills on and off the pottery wheel, build a gas-fired outdoor kiln and explore the ancient firing technique of Raku. Outdoor firing will take place at a local studio, and we will visit a gallery or two. Some previous experience with ceramics would be great but not necessary.

What is Raku? Modern Raku is best described as a firing process in which ceramic pieces are taken up to approximately 1800 degrees in an outdoor propane-fueled kiln. At this point, the pot is removed from the kiln and placed carefully into a container filled with combustible material - newspaper, leaves, shavings, hay, etc. The container is then closed up causing the atmosphere inside the container to be starved of oxygen, the clay to turn from white to black, and the glazes to change color in dramatic and unpredictable ways. For winter term we will explore Raku Western style, Saggar, Horse Hair Raku and other techniques as time allows.

**19. Spill the Beans**

K. Nam

Expected Cost: \$

In this course, students will be given an opportunity to take a break from their busy school life and reflect on various things such as the meaning of life, one's identity, good and evil, prayer, and the truth. To help students reflect, they will learn how to brew tea (both western and eastern traditions) and coffee (various brewing methods). Students will engage in discussions on various topics after reading a book and watching movies, and they will use fountain pens to regularly write their reflections on their journals. When possible, we will try to visit local cafes, breweries, temples, churches, and mosques.

**20. Still Waters: Creative Writing Workshop**

D. Charpentier and D. Price

Expected Cost: \$

Love to write but don't have the time? Working on something and want some feedback? Have you always wanted to live the writing life? Then this course is for you! In this class, you have the time to imagine, create, share, receive feedback and revise. Work on one long piece or a collection of shorter works. The course is divided into three phases: in the first phase, the instructors walk you through a series of writing exercises designed to both produce ideas and practice specific skills. In the second phase, you focus on producing a volume of work – the majority of your time is devoted to this creative process, along with giving and receiving feedback in workshops as you work toward polished pieces. The third phase is devoted to fine-tuning, publishing in some way, and doing public readings. You will be surprised at what you can accomplish!

## **21. “Subversive Stitches”: Embroidery and Quilting as Activism Throughout History**

M. Musto and A. Medved

Expected Cost: \$

Throughout history groups silent in the written record have used craft (particularly quilting and embroidery) as a way to voice their thoughts and ideas. In US History, African American women in the 19th century produced amazing quilts that helped to convey their ideas in a time when they were silent in the official written record. Later activists created the AIDS quilt to give voice to the thousands of men and women who died unheard due to AIDS. Today, people in Latin America are using embroidery to speak out against violence towards women using a traditionally female craft. This is just a snapshot of the many ways people have used textile crafts to find their voice. In this class, we will explore the use of quilting and embroidery as activism both in the past and today. We will also learn basic embroidery and quilting techniques to allow each student to bring their own craftivism project to life at the conclusion of the course. Join us to explore textile arts in a creative way to speak and bring attention to an issue of your choice whether it is climate change, racial justice, women’s rights or any issue you feel needs your voice.

## **22. Teen-Noir: A Cinematic Winter Term**

M. Nagel and S. Nagel

Expected Cost: \$

Teen-Noir will be devoted to the creation of a Student-Noir film and daily screenings of classic Hollywood Noir Films filled with vigilante antiheroes, corruption, murder, organized crime, existentialism, duplicity, and jazz. We will learn the components of Noir: its themes, its narrative structures, and its aesthetics. We will study Noir’s roots in German Expressionism, Depression-Era gangster movies, pulp fiction, and hard-boiled detective fiction. We will consider the contemporaneous cultural moment and its factors in the post-World War II America that gave rise to the genre. By screening entire films and selective scenes, students will be exposed to art history, brilliant directors, and an understanding of how film/moving images came to be. Finally, we will chart Film Noir’s continued legacy within its 1970s revival, The French New Wave, and the resurgence of Neo-Noir & Tech-Noir in recent years.

Students will also make a film of their own! They’ll be introduced to the technical and fundamental skills needed to create short films, such as visual/audio capture techniques and Adobe Premiere Pro. By exploring the medium through screenings and lighting demos, students will study narrative structures, creative concepts, editing techniques, and visual rules to understand the Noir style. Collectively, we will build our own Noir plot generator and location scout to ensure we create an exciting short film. Lastly, the short film we create will be bookended by an intro, movie poster, and outro, all filmed and photographed in downtown Boston. The priorities of this term are visual literacy, personal creativity, collaboration, technical proficiency, and above all else, excitement and fun!

*NOTE: Film Content Warning. In this course, we will screen revered films from the 1950s that are often selected to generate discourse and provide a deeper understanding of the foundations of cinema. Films we screen will span the Motion Picture Association (MPA) ratings ranging from G (General Audiences) to R (Restricted). The R-rated films we selected are rated as such because there may be material that some would consider objectionable such as sexual references, strong language, and violence. There may also be some scenes that would be considered sexist or racist by today’s standards, which we will discuss and contextualize. Parental/guardian permission is required to enroll in this course.*

### **23. The Great Outdoors**

T. Benson and L. Lafond

Expected Cost: +\$200

Come explore and enjoy the great outdoors in winter. Our focus is getting out into nature and enjoying the season through ice climbing, skiing (alpine), mountain biking, and hiking. We spend time in the White Mountains of New Hampshire learning about avalanche safety and awareness, along with winter survival skills. We also spend time learning navigation skills using a map and compass, as well as a GPS. You do not need prior experience to join us, though you must be willing to face some challenging winter conditions. Be sure to bring a sense of adventure and a desire to enjoy New England in January.

*NOTE: Due to conditions imposed by outside trip leaders, students must be 16 years of age by January 7, 2022 in order to participate in this course.*

### **24. The Power of Positive Living**

A. Johnston, T. O'Brien, and S. Spollett

Expected Cost: \$

Are you worried about the future and how to live a healthy lifestyle? Take this winter term course and learn about the power of positive living! We look at what is great in people and help them learn how to cater and direct their lives towards playing to their strengths. You discover your personal strengths and virtues and use them to learn how to secure your own personal state of happiness. We use various hands-on activities as well as self-exploration activities to help discover those strengths. We also explore what healthy relationships are in the 21st century and how the pressures of society today have changed how people relate to one another. This winter term course also provides you with basic survival skills for the "real world". You will know how to be a successful young adult in today's world. We focus on tasks such as how to rent an apartment, cook, sew, network for a job, and basic carpentry tasks. If you would like to look at the world in a more knowledgeable, confident, and positive way, please sign up for this course!

### **25. The Science and History of Human Health & Disease**

A. Nasser and E. Mandzhukova-Wamboldt

Expected Cost: \$

From leeches to surgical robots, from the Bubonic Plague to COVID-19. Join us this winter to explore the advancements and changes in medicine and its impact on human health and society from ancient history to the modern era through a historical and scientific perspective.

Together we will travel through time, using a case study approach to explore how human health has been impacted by various spheres of life. These will include topics within politics, ethics, the environment, public health, genetics, and technology. Students will visit local laboratories and hospitals, meet with doctors and nurses in the field, examine human nature at its core, and complete a genetics lab.

*NOTE: In order to attend surgery, students are required to have all immunizations up-to-date and a TB test performed in the last 6 months. The needed information will be coordinated with the help of the Health Center.*

**26. Walking Boston**

A. Wang, P. Willis, and A. Heinze

Expected Cost: \$

Examine and learn about the history, culture, landscape and architecture of the great city of Boston. Students will research various sections of the city from its formation, historical significance, the culture and people for whom the area is known, and will then guide the class through these areas of Boston. Students will learn to use the MBTA system, will explore local food and culture, and go beyond the tourist highlights of Boston to understand its history, significance and culture. The highlight of this course will be the opportunity to explore the city and see the student's research while walking Boston on foot. Comfortable shoes and winter weather gear is a must for this course.

**27. Winter Term: Independent!**

Advisor: J. McDonough

Expected Cost: \$

Have an idea for an independent project on-campus or in the surrounding community? Want to explore a particular passion or interest? Have an idea for a product you'd like to create? This year, 12th grade students have the opportunity to propose a Winter Term Independent, a project they will work on on-campus during the three week Winter Term. Students will be expected to present their final projects during the Winter Term symposium. Students will need to submit a proposal to Ms. McDonough to gain approval for an independent. Students will be expected to be based on-campus for their Winter Term Independent and will be able to take day trips in the surrounding areas as necessary. Proposals will be accepted until Friday, November 19.

*NOTE: Winter Term Independents are open to 12th grade students only. If choosing this option, please list Winter Term Independent as your top choice and then pick seven additional courses you would like to take if your proposal is not approved. [Winter Term Independent Proposal linked here!](#)*